

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use several sheets if necessary) (PTO-1449)	ATTY. DOCKET NO. 19603/461 (CRF D-1595A)		SERIAL NO. 08/794,851
	APPLICANT Barany et al.		
	FILING DATE February 4, 1997	GROUP ART UNIT 1648	

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPRO- PRIATE
<i>JS</i>	1	5,695,934	12/09/97	Brenner			

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANS- LATION IF APPRO- PRIATE

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, Etc.)

	2	Pease et al., "Light-Generated Oligonucleotide Arrays for Rapid DNA Sequence Analysis," <u>Proc. Natl. Acad. Sci. USA</u> , 91:5022-5026 (1994)
	3	Beattie et al., "Advances in Genosensor Research," <u>Clin. Chem.</u> , 41(5):700-706 (1995)
	4	Cronin et al., "Cystic Fibrosis Mutation Detection by Hybridization to Light-Generated DNA Probe Arrays," <u>Human Mutation</u> , 7:244-255 (1996)
	5	Milner et al., "Selecting Effective Antisense Reagents on Combinatorial Oligonucleotide Arrays," <u>Nature Biotechnology</u> , 15:537-541 (1997)
	6	Wang et al., "Large-Scale Identification, Mapping, and Genotyping of Single-Nucleotide Polymorphisms in the Human Genome," <u>Science</u> , 280:1077-1082 (1998)
	7	Southern, E.M., "DNA Chips: Analysing Sequence by Hybridization to Oligonucleotides on a Large Scale," <u>TIG</u> , 12(3):110-115 (1996)
EXAMINER <i>Joseph R. Ruffin</i>		DATE CONSIDERED 10/28/98

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 6 9; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICEINFORMATION DISCLOSURE
STATEMENT BY APPLICANT

(use several sheets if necessary)

(PTO-1449)

ATTY. DOCKET NO.

19603/461

SERIAL NO.

0 /

APPLICANT

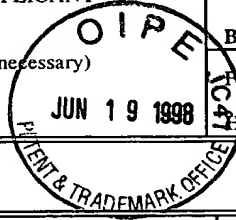
Barany et al.

FILING DATE

Herewith

GROUP

To be Assigned



U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
<i>BM</i>	1	5,143,854	9/1/1992	Pirrung et al.			
	2	5,202,231	4/13/1993	Drmanac et al.			
	3	5,258,506	11/2/1993	Urdea et al.			
	4	5,288,468	2/22/1994	Church et al.			
	5	5,371,241	12/6/1994	Brush et al.			
	6	5,424,186	6/13/1995	Fodor et al.			
<i>BM</i>	7	5,278,298	1/11/1994	Chakraborty et al.			

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION IF APPROPRIATE
	8	WO 89/10977	16-NOV-89	Europe			
	9	WO 90/15070	13-DEC-90	Europe			
	10	WO 92/10588	25-JUN-92	Europe			
	11	WO 92/16655	1-OCT-92	PCT			
	12	EP 0 601 714 A1	15-JUN-94	Europe			
	13	WO 93/17126	2-SEPT-93	Europe			

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, Etc.)

	14	Day et al., "Detection of Steroid 21-Hydroxylase Alleles Using Gene-Specific PCR and a Multiplexed Ligation Detection Reaction," <i>Genomics</i> , 29:152-162 (1995)
	15	Grossman et al., "High-Density Multiplex Detection of Nucleic Acid Sequences: Oligonucleotide Ligation Assay and Sequence-Coded Separation," <i>Nucleic Acids Research</i> , 22(21):4527-4534 (1994)
	16	Jin et al., "Alternating Current Impedance Characterization of the Structure of Alkylsiloxane Self-Assembled Monolayers on Silicon," <i>Langmuir</i> , 10:2662-2671 (1994)
	17	Cheng et al., "In Situ Attenuated Total Reflectance Fourier Transform Infrared Spectroscopy of Carboxylate-Bearing, Siloxane-Anchored, Self-Assembled Monolayers: A Study of Carboxylate Reactivity and Acid-Base Properties," <i>Langmuir</i> , 11:1190-1195 (1995)
	18	Kim et al., "Polymeric Self-Assembled Monolayers. 2. Synthesis and Characterization of Self-Assembled Polydiacetylene Mono- and Multilayers," <i>J. Am. Chem. Soc.</i> , 117:3963-3967 (1995)

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 6 9; Draw line through citation if not in conformance and considered. Include copy of this form with next communication to applicant.

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICEINFORMATION DISCLOSURE
STATEMENT BY APPLICANT

(use several sheets if necessary)

(PTO-1449)

ATTY. DOCKET NO.

19603/461

SERIAL NO.

0 /

APPLICANT

Barany et al.

FILING DATE

Herewith

GROUP

To be Assigned

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPRO- PRIATE
<i>JS</i>	19	5,290,925	3/1/1994	Fino			
	20	5,324,633	6/28/1994	Fodor et al.			
	21	5,352,582	10/4/1994	Lichtenwalter et al.			
	22	5,405,783	4/11/1995	Pirrung et al.			
<i>JS</i>	23	5,470,705	11/28/1995	Grossman et al.			

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATIO IF APPRO- PRIATE
	24	WO 93/20236	14-OCT-93	Europe			
	25	WO 94/17210	4-AUG-94	Europe			
	26	WO 94/17206	4-AUG-94	Europe			
	27	WO 94/11530	26-MAY-94	Europe			
	28	WO 94/09022	28-APR-94	Europe			

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, Etc.)

	29	Lauer et al., "Cloning, Nucleotide Sequence, and Engineered Expression of <i>Thermus thermophilus</i> DNA Ligase, a Homolog of <i>Escherichia coli</i> DNA Ligase," <i>Journal of Bacteriology</i> , 173(16):5047-5053 (1991)
	30	Barany et al., "Cloning, Overexpression and Nucleotide Sequence of a Thermostable DNA Ligase-Encoding Gene," <i>Gene</i> , 109:1-11 (1991)
	31	Jou et al., "Deletion Detection in the Dystrophin Gene by Multiplex Gap Ligase Chain Reaction and Immunochromatographic Strip Technology," <i>Human Mutation</i> , 5:86-93 (1995)
	32	Chan et al., "Polymeric Self Assembled Monolayers. 3. Pattern Transfer by Use of Photolithography, Electrochemical Methods, and an Ultrathin, Self-Assembled Diacetylenic Resist," <i>J. Am. Chem. Soc.</i> , 117:5875-5976 (1995)
	33	Munkholm et al., "Polymer Modification of Fiber Optic Chemical Sensors as a Method of Enhancing Fluorescence Signal for pH Measurement," <i>Anal. Chem.</i> 58:1427-1430 (1986)

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 6 9; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

ROC10:103818

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICEINFORMATION DISCLOSURE
STATEMENT BY APPLICANT

(use several sheets if necessary)

(PTO-1449)

ATTY. DOCKET NO.

19603/461

SERIAL NO.

0 /

APPLICANT

Barany et al.

FILING DATE

Herewith

GROUP

To be Assigned



U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPRO- PRIATE
<i>gmk</i>	34	5,494,810	2/27/1996	Barany et al.			

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION IF APPRO- PRIATE

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, Etc.)

	35	Graham et al., "Gene Probe Assays on a Fibre-Optic Evanescent Wave Biosensor," Biosensors & Bioelectronics, 7:487-493 (1992)
	36	Chetverin et al., "Sequencing of Pools of Nucleic Acids on Oligonucleotide Arrays," BioSystems, 30:215-231 (1993)
	37	Pease et al., "Light-Generated Oligonucleotide Arrays for Rapid DNA Sequence Analysis," Proc. Natl. Acad. Sci. USA, 91:5022-5026 (1994)
	38	Beattie et al., "Advances in Genosensor Research," Clin. Chem., 41(5) 700-706 (1995)
	39	Bains, W., "Mixed Hybridization and Conventional Strategies for DNA Sequencing," Gata, 10(3-4):84-94 (1993)
	40	Kuznetsova et al., "DNA Sequencing by Hybridization with Oligonucleotides Immobilized in a Gel," Mol. Biol. (Mosk) (Russia), 28(2):290-299

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 6 9; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

ROC10:103818

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use several sheets if necessary) (PTO-1449) JUN 29 1998	ATTY. DOCKET NO. 19603/461 (CRF D-1595A)	SERIAL NO. 08/794,851
	APPLICANT Barany et al.	
	FILING DATE February 4, 1997	GROUP ART UNIT 1648

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPRO- PRIATE
<i>Jm</i>	1	5,744,305	04/28/98	Fodor et al.		

FOREIGN PATENT DOCUMENTS

DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANS- LATION IF APPRO- PRIATE

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 6 9; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.